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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/554,160	10/21/2005	Erwin Baucr	2003P02166WOUS	7638

7590 12/06/2007  
Eric C. Swanson  
Siemens Corporation  
Intellectual Property Department  
170 Wood Avenue South  
Iselin, NJ 08830

EXAMINER
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TRIEU, THAI BA

ART UNIT	PAPER NUMBER
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3748

MAIL DATE	DELIVERY MODE
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12/06/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/554,160

Applicant(s)

BAUER ET AL.

Examiner

Thai-Ba Trieu

Art Unit

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2007.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 24, 26-32, 34-37, 39-42 and 44-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24, 26-32, 34-37, 39-42 and 44-46 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

This Office Action is in response to the Amendment filed on October 10, 2007. Applicant's cooperation in amending the claims to overcome the claim rejections relating to indefinite claim language is also appreciated.

Claims 24, 29-30, 32, 37, 42 were amended; and claims 1-23, 25, 33, 38, and 43 were cancelled.

This application is in condition for allowance except for the following formal matters:

Since Claims 37, 39-72, and 44-46 are method claims; applicants are suggested to revise these claims in the format of method claims, for example:

-- 37. A method for influencing an induction gas temperature of an internal combustion engine, comprising:

compressing induced fresh air having a first temperature (T1) before compression;

expanding the compressed induced fresh air such that the compressed and subsequently expanded fresh air has a second temperature (T2) greater than the first temperature;

recording the second temperature (T2) after the expansion;

**recirculating exhaust gas with** an exhaust gas recirculation device to combine exhaust gas from an earlier combustion cycle with the fresh air to form a mixture featuring exhaust gas and fresh air;

cooling exhaust gas with an exhaust gas cooler, connected the exhaust gas cooler to the exhaust gas recirculation device to influence the temperature of the exhaust gas b controlling the heat flow within the exhaust gas recirculation device;

providing a control/regulation/computation device which includes a first device and a second device;

calculating a required exhaust gas temperature with the first device, the first device connected to [[a]] the second device for calculating a coolant through-flow of the exhaust gas cooler, the second device is connected via a coolant flow regulation path to a coolant flow controller;

wherein said calculating the required exhaust temperature are based on determining/sensing/measuring/computing measured values and set-point values of [[for calculating the required exhaust temperature are assigned to]] engine operating variables selected from the group consisting of: exhaust gas temperature, recirculated exhaust gas mass, recirculated exhaust gas quantity, air/fuel temperature, air/fuel mass, air/fuel quantity, induction gas temperature, induction gas mass, induction gas quantity, coolant temperature, oil temperature of the coolant, oil flowing through the exhaust gas cooler, coolant mass, oil mass, coolant quantity, oil quantity of the coolant, and oil flowing through the exhaust gas cooler; and

wherein explicitly influencing the combustion chamber temperature by controlling the heat flow to the combustion chamber and thereby the energy level in the combustion chamber are based on/depends upon the

determined/ sensed/ computed measured values, the determined/ sensed/ computed set-point values; the determined/ sensed/ computed measured values temperature increase of the fresh air from the first temperature (T1) to the second temperature (T2) [[the control/regulation/computation device uses the measured values, set point values, and the temperature increase of the fresh air from (T1) to (T2) to explicit influence the combustion chamber temperature by controlling the heat flow to the combustion chamber and thereby the energy level in the combustion chamber.]] -

-- Claim 39, The method in accordance with claim 37, wherein [[compression]] the compressing step is performed by an exhaust gas turbocharger.--

Claims 40-42 and 44-46 should be revised as the format being set forth above.

### **Conclusion**

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 25 USPQ 74, 453 O.G. 213, (Comm'r Pat. 1935).

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai-Ba Trieu whose telephone number is (571) 272-4867. The examiner can normally be reached on Monday - Thursday (6:30-5:00).


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TTB  
November 28, 2007

  
Thai-Ba Trieu  
Primary Examiner  
Art Unit 3748